

**COMPLETE LISTING OF THE CLAIMS**

Claim 1 (currently amended): A multi-track digital recording/reproducing apparatus for recording and reproducing digital audio data by using multiple tracks, comprising:

a recording track-setting section that sets each of a plurality of tracks to one of a recording ON state and a recording OFF state, as desired;

a mute track-setting section that sets each of a plurality of tracks to one of a mute ON state and a mute OFF state, as desired, the digital audio data being recorded on the tracks set to the recording ON state while the recorded digital audio data being reproduced from the tracks set to the mute OFF state;

a reproducible track number-determining section that determines a reproducible number indicating a number of tracks that can be reproduced simultaneously, said reproducible number determined based on a number of tracks of the plurality of tracks set to the recording ON state; and

a reproducing track number-limiting section that limits a number of tracks to be set to the mute OFF state, by automatically changing at least predetermined one of the tracks from the mute OFF state to the mute ON state when said recording track-setting section increases the number of tracks set to the recording ON state and said reproducible number decreases below the number of tracks set to the mute OFF state, and by inhibiting said mute track-setting section from setting more than said reproducible number of tracks to the mute OFF state.

Claims 2 - 8 (cancelled)

Claim 9 (currently amended): A multi-track digital recording/reproducing method using a multi-track digital recording/reproducing apparatus for recording and reproducing digital audio data by using multiple tracks, the multi-track digital recording/reproducing method comprising:

a recording track-setting step of setting each of a plurality of tracks to one of a recording ON state and a recording OFF state, as desired;

a mute track-setting step of setting each of a plurality of tracks to one of a mute ON state and a mute OFF state, as desired, the digital audio data being recorded on the tracks set to the recording ON state while the recorded digital audio data being reproduced from the tracks set to the mute OFF state;

a reproducible track number-determining step of determining a reproducible number indicating a number of tracks that can be reproduced simultaneously, said reproducible number determined based on a number of tracks of the plurality of tracks set to the recording ON state; and

a reproducing track number-limiting step of limiting a number of tracks to be set to the mute OFF state by automatically changing at least predetermined one of the tracks from the mute OFF state to the mute ON state when said recording track-setting step increases the number of tracks set to the recording ON state and said reproducible number decreases below the number of tracks set to the mute OFF state,

wherein said mute track-setting step does not set more than said reproducible number of tracks to the mute OFF state.

Claims 10 – 13 (cancelled)

Claim 14 (currently amended): A recording/reproducing program embodied on a computer-readable medium ~~executable by a computer~~, the program containing executable instructions for causing a ~~using a~~ multi-track digital recording/reproducing apparatus to record and reproduce ~~for recording and reproducing~~ digital audio data by using multiple tracks, the program comprising:

a recording track-setting module that sets each of a plurality of tracks to one of a recording ON state and a recording OFF state, as desired;

a mute track-setting module that sets each of a plurality of tracks to one of a mute ON state and a mute OFF state, as desired, the digital audio data being recorded on the tracks set to the recording ON state while the recorded digital audio data being reproduced from the tracks set to the mute OFF state;

a reproducible track number-determining module that determines a reproducible number indicating a number of tracks that can be reproduced simultaneously, said reproducible number determined based on a number of tracks of the plurality of tracks set to the recording ON state; and

a reproducing track number-limiting module that limits a number of tracks to be set to the mute OFF state, by automatically changing at least predetermined one of the tracks from the mute OFF state to the mute ON state when said recording track-setting module increases the number of tracks set to the recording ON state and said reproducible number decreases below the number of tracks set to the mute OFF state, and by inhibiting said mute track-setting module from setting more than said reproducible number of tracks to the mute OFF state.

Claims 15 - 18 (cancelled)

Claim 19 (previously presented): A multi-track digital recording/reproducing apparatus according to claim 1, including a mode designating section that designates an operation mode corresponding to a bit number of the digital audio data to be recorded in the operation mode from among a plurality of operation modes, and wherein said reproducible track number-determining section determines the number of tracks available for simultaneous reproduction, based on the designated operation mode and the number of tracks set to the recording ON state.

Claim 20 (currently amended): A multi-track digital recording/reproducing apparatus for recording and reproducing digital audio data by using multiple tracks, comprising:

a display section;

a plurality of input sections that input audio data from at least one external device;

a plurality of mixing input channels that control characteristics of the audio data inputted thereto, and output the audio data;

an input patch section that causes said display section to display a status of assignment of the plurality of input sections to the plurality of mixing input channels, sets the status of assignment according to user's operation, and connects between the plurality of input sections and the plurality of mixing input channels so as to selectively input the audio data from the plurality of input sections to the plurality of mixing input channels according to the set status of assignment;

a plurality of mixing buses that mix a plurality of the audio data inputted thereto, and output the mixed audio data;

a mixing selection section that causes said display section to display an output status of the audio data outputted from the plurality of mixing input channels to the plurality of mixing buses, sets the output status according to user's operation, and selectively outputs the audio data from the plurality of mixing input channels to the plurality of mixing buses according to the set output status;

a recorder that is capable of recording a plurality of the audio data supplied thereto on a plurality of tracks simultaneously;

a recording selection section that causes said display section to display a status of assignment of the plurality of mixing buses or the plurality of mixing input channels to the plurality of tracks, sets the status of assignment according to user's operation, and selectively inputs the audio data outputted from the plurality of mixing buses or the plurality of mixing input channels to the plurality

of tracks;

a selecting section that selects any one of the plurality of mixing input channels; and

a channel-path display control section that causes said display section to display in graphical representation, concerning the mixing input channel selected by said selecting section, the status of assignment set by said input patch section, the output status set by said mixing selection section, and the status of assignment set by said recording selection section simultaneously, in an arrangement along a transfer path of the audio data input to the mixing input channel selected by said selecting section.

Claim 21 (currently amended): A multi-track digital recording/reproducing apparatus for recording and reproducing digital audio data by using multiple tracks, comprising:

a plurality of input sections that input audio data from at least one external device;

a plurality of mixing input channels that control characteristics of the audio data inputted thereto, and output the audio data;

a recorder that is capable of recording or reproducing a plurality of the audio data supplied thereto on or from a plurality of tracks thereof simultaneously;

a plurality of recorder channels that are permanently assigned to respective ones of the plurality of tracks of said recorder, the plurality of recorder channels each inputting the audio data from an associated one of the plurality of tracks, controlling characteristics of the inputted audio data, and outputting the audio data;

a plurality of mixing buses that selectively input and mix a plurality of the audio data outputted from the plurality of mixing input channels and the plurality of recorder channels, and output the mixed audio data.

an input patch section that selectively assigns at least one of the plurality of input sections to at least one of the plurality of mixing input channels according to user's operation, and connects between the at least one of the plurality of input sections and the at least one of the plurality of mixing input channels so as to input the audio data from the at least one of the plurality of input sections to the at least one of the plurality of mixing input channels according to the assignment; and

a recording selection section that assigns at least one of the plurality of mixing buses and ~~or~~ ~~at least one of the plurality of mixing input channels~~ to at least one of the plurality of tracks according to user's operation, and connects between the at least one of the plurality of mixing buses and ~~or the at least one of the plurality of mixing input channels~~ and the at least one of the plurality of

tracks so as to input the audio data from the at least one of the plurality of mixing buses ~~or the at least one of~~ and the plurality of mixing input channels to the at least one of the plurality of tracks according to the assignment by said recording selection section,

wherein, when a mixing input channel is assigned to a track by said recording selection section, the mixing input channel is directly connected to the track.



Claim 22 (currently amended): A multi-track digital recording/reproducing apparatus for recording and reproducing digital audio data by using multiple tracks, comprising:

a plurality of input sections that input audio data from at least one external device;

a plurality of input channels that control characteristics of the audio data inputted thereto, and output the audio data;

a plurality of mixing buses that input and mix a plurality of the audio data outputted from the plurality of ~~mixing~~ input channels, and output the mixed audio data;

a recorder that is capable of recording or reproducing a plurality of audio data supplied thereto on or from a plurality of tracks simultaneously;

an input patch that selectively assigns at least one of the plurality of input sections to at least one of the plurality of input channels when an instruction for assigning any one of the plurality of input sections to the at least one input channel is given by a user, and connects between the at least one of the plurality of input sections and the at least one of the plurality of input channels so as to input the audio data from the at least one of the plurality of input sections to the at least one of the plurality of input channels according to the assignment;

a recording selector ~~that assigns at least one of the plurality of mixing buses and at least one of the plurality of~~ that assigns at least one of the plurality of mixing buses and the plurality of input channels to at least one of the plurality of tracks when an instruction for assigning any one of the plurality of input channels and the plurality of mixing buses to the at least one track is given by the user, and connects between the at least one of the plurality of mixing buses and ~~or the at least one of~~ the plurality of input channels and the at least one of the plurality of tracks so as to input the audio data from the at least one of the plurality of mixing buses and ~~or the at least one of~~ the plurality of input channels to the at least one of the plurality of tracks according to the assignment by said

recording selector; and

a collective setting section that is responsive to user's single operation for causing said input patch to assign each of the designated input sections to an associated one of the designated input channels, and causing said recording selector to assign each of the designated input channels to an associated one of the designated tracks in a collective manner, said user's single operation including designation of input sections from among the plurality of input sections, designation of input channels from among the plurality of input channels, and designation of tracks from among the plurality of tracks.